WHAT IS CLAIMED IS

5

  1. An image compressing apparatus comprising:

  a part performing pixel thinning-out operation and compressing image data; and

  a part determining a position of pixel to be

10 thinned out along a first direction depending on the position thereof along a second direction perpendicular to the first direction.

15

  2. The apparatus as claimed in claim 1, wherein the position of pixel to be thinned out along the first direction has a predetermined relationship

20 with the position thereof along the second direction.

25   3. The apparatus as claimed in claim 1,

wherein the position of pixel to be thinned out
comprises a position with respect to each unit area of
the relevant image including a predetermined number of
pixels.

5

4.   The apparatus as claimed in claim 3,
10   wherein the positions of pixels to be thinned out along
the first direction are determined along the second
direction so that the positions of pixels to be thinned
out do not align with one another between each pair of
unit areas adjacent to one another along the second
15   direction.

20   5.   An image decompressing apparatus
comprising:
        a part interpolating thinned-out pixels; and
        a part determining pixels to be used for the
interpolation,
25   wherein said part determining the pixel to be

used for interpolation determines such that pixels
nearest to the thinned-out pixels may be selected
therefor.

5

6.   The image decompressing apparatus as
claimed in claim 5, wherein said part determining the
10   pixel to be used for interpolation for thinned-out
pixels determines such that pixels not included in an
original pixel block in which the thinned-out pixels are
included may be selected therefor.

15

7.   The image decompressing apparatus as
claimed in claim 5, wherein said part determining the
20   pixel to be used for interpolation determines such that
pixels adjacent to an original pixel block via short
sides thereof may be selected.

25

8.　An image decompressing apparatus

comprising:

a part performing interpolation of thinned-out

pixels; and

5　　a part determining a method of the

interpolation according to a pixel-number changing rate

of pixel-number changing processing performed after the

interpolation such that a finer interpolation method be

selected as the pixel-number changing rate at which the

10　number of pixels is increased becomes larger.

15　　9.　The image decompressing apparatus as

claimed in claim 8, wherein a nearest pixel method is

selected when the pixel-number changing rage is less

than a first threshold, a linear interpolation method is

applied when the pixel-number changing rate falls within

20　a range between the first threshold and a second

threshold, and a three-order interpolation method is

applied when the pixel-number changing rate is more than

the second threshold.

25

10. An image decompressing apparatus comprising:

a part interpolating thinned-out pixels from not-thinned-out pixels; and

5 a part determining an interpolating method applied,

wherein said part determining an interpolating method applied applies a less finer interpolation method for thinned-out pixels located nearer to the not-

10 thinned-out pixels used for the interpolation.

15 11. The image decompressing apparatus as claimed in claim 10, wherein said part determining an interpolating method applied selectively applies a plurality of interpolation methods and determines the interpolation method to be applied according to the

20 center-to-center pixels distances from the not-thinned-out pixels.

25

12. The image decompressing apparatus as claimed in claim 10, wherein said part determining an interpolating method applied applies a nearest pixel method for thinned-out pixels nearest to the not-

5 thinned-out pixels used for interpolation, applies at least one of a linear interpolation method and a third-order interpolation method for the other pixels.

10

13. An image compressing method comprising the steps of:

a) performing pixel thinning-out operation and

15 compressing image data; and

b) determining positions of pixels to be thinned out along a first direction depending on the positions thereof along a second direction perpendicular to the first direction.

20

14. The method as claimed in claim 13,

25 wherein the positions of pixels to be thinned out

comprise positions with respect to each unit area of the

relevant image including a predetermined number of

pixels.

5

15.   The method as claimed in claim 14,

wherein the positions of pixels to be thinned out along

10   the first direction are determined along the second

direction so that the positions of pixels to be thinned

out do not align with one another between each pair of

unit areas adjacent to one another along the second

direction.

15

16.   An image decompressing method comprising

20   the steps of:

a) interpolating thinned-out pixels; and

b) determining pixels to be used for the

interpolation,

wherein said step b) determines such that

25   pixels nearest to the thinned-out pixels may be applied.

17.   The method as claimed in claim 16,
wherein said step b) determines such that pixels not
included in an original pixel block in which thinned-out
pixels are included may be applied for interpolation of
5   the thinned-out pixels.

18.   The method as claimed in claim 16,
10   wherein said step b) determines such that pixels
adjacent to an original pixel block in which thinned-out
pixels are included via short sides thereof may be
applied for interpolation of the thinned-out pixels.
15

19.   An image decompressing method comprising
20   the steps of:
    a) performing interpolation of thinned-out
pixels; and
    b) determining a method of the interpolation
according to a pixel-number changing rate of pixel-
25   number changing processing performed after the

interpolation such that a finer interpolation method be selected as the pixel-number changing rate at which the number of pixels is increased becomes larger.

5

20. The image decompressing method as claimed in claim 19, wherein a nearest pixel method is applied

10 when the pixel-number changing rage is less than a first threshold, a linear interpolation method is applied when the pixel-number changing rate falls within a range between the first threshold and a second threshold, and a three-order interpolation method is applied when the

15 pixel-number changing rate is more than the second threshold.

20

21. An image decompressing method comprising the steps of:

a) interpolating thinned-out pixels from not-thinned-out pixels; and

25 b) determining an interpolating method applied,

wherein said step b) applies a less finer interpolation method for thinned-out pixels located nearer to the not-thinned-out pixels used for the interpolation.

5

22.   The methods as claimed in claim 21,
10   wherein said step b) selectively applies a plurality of interpolation methods and determines the interpolation method to be applied according to the center-to-center pixels distances from the not-thinned-out pixels.

15

23.   The method as claimed in claim 21, wherein said step b) applies a nearest pixel method for
20   thinned-out pixels most nearest to the not-thinned-out pixels used for interpolation, but applies at least one of a linear interpolation method and a third-order interpolation method for the other pixels.

25

24. A computer-readable information recording medium having a software program recorded therein to be read by a general-purpose computer so as to cause the computer to perform the steps of:

5 a) performing pixel thinning-out operation and compressing image data; and

b) determining positions of pixels to be thinned out along a first direction depending on the positions thereof along a second direction perpendicular

10 to the first direction.

15 25. The computer-readable information recording medium as claimed in claim 24, wherein the software program is such that the positions of pixels to be thinned out comprise positions with respect to each unit area of the relevant image including a

20 predetermined number of pixels.

25 26. The computer-readable information

recording medium as claimed in claim 24, wherein the
software program is such that the positions of pixels to
be thinned out along the first direction are determined
along the second direction so that the positions of

5   pixels to be thinned out do not align with one another
between each pair of unit areas adjacent to one another
along the second direction.

10

27.   A computer-readable information recording
medium having a software program recorded therein to be
read by a general-purpose computer so as to cause the

15   computer to perform the steps of:

a) interpolating thinned-out pixels; and

b) determining pixels to be used for the
interpolation,

wherein said step b) determines such that

20   pixels nearest to the thinned-out pixels may be selected.

25   28.   The computer-readable information

recording medium as claimed in claim 27, wherein the
software program is such that said step b) determines
such that pixels not included in an original pixel block
in which thinned-out pixels are included may be applied
5   for interpolation of the thinned-out pixels.

10   29. The computer-readable information
recording medium as claimed in claim 27, wherein the
software program is such that said step b) determines
such that pixels adjacent to an original pixel block in
which thinned-out pixels are included via short sides
15   thereof may be applied for interpolation of the thinned-
out pixels.

20

             30. A computer-readable information recording
medium having a software program recorded therein to be
read by a general-purpose computer so as to cause the
computer to perform the steps of:
25   a) performing interpolation of thinned-out

pixels; and

b) determining a method of the interpolation according to a pixel-number changing rate of pixel-number changing processing performed after the

5   interpolation such that a finer interpolation method be selected as the pixel-number changing rate at which the number of pixels is increased becomes larger.

10

31.   The computer-readable information recording medium as claimed in claim 30, wherein the software program is such that a nearest pixel method is

15   applied when the pixel-number changing rage is less than a first threshold, a linear interpolation method is applied when the pixel-number changing rate falls within a range between the first threshold and a second threshold, and a three-order interpolation method is

20   applied when the pixel-number changing rate is more than the second threshold.

25

32. A computer-readable information recording medium having a software program recorded therein to be read by a general-purpose computer so as to cause the computer to perform the steps of:

5   a) interpolating thinned-out pixels from not-thinned-out pixels; and

          b) determining an interpolating method applied,

          wherein said step b) applies a less finer interpolation method for thinned-out pixels located

10   nearer to the not-thinned-out pixels used for the interpolation.

15

33. The computer-readable information recording medium as claimed in claim 32, wherein said step b) selectively applies a plurality of interpolation methods and determines the interpolation method to be

20   applied according to the center-to-center pixels distances from the not-thinned-out pixels.

25

34. The computer-readable information recording medium as claimed in claim 32, wherein the software program is such that said step b) applies a nearest pixel method for thinned-out pixels most nearest to the not-thinned-out pixels used for interpolation, but applies at least one of a linear interpolation method and a third-order interpolation method for the other pixels.